Opponents would argue that the Congress took sufficient action in 1976 to curb the overindexation of federal retirement benefits. After so many years, to require annuitants to forgo extra income by limiting future COLAs would be unfair. In response to the criticism that federal annuities have been rising faster than pay, some observers would hold that the resulting retirement exodus is the price of the government's policy to restrain pay raises for budgetary reasons. The solution, they would contend, is not to reduce retirees' protection against inflation, but rather to set compensation for active employees at levels that can attract and retain the desired work force.

REDUCING EMPLOYMENT COSTS

This section describes two strategies that could reduce federal employment costs without changing federal pay and benefit levels. First, requiring the Postal Service to fund its full share of retirement and annuitant health-care costs could result in 1988 savings in excess of $1.5 billion. (Elimination of other subsidies to the Postal Service is examined in Chapter IX.) The second strategy--making more vigorous use of private contractors to meet the federal government's needs for certain support services--could reduce the total federal work force and thus lower compensation costs in the long run.

Charge the Postal Service for Annuitant Health Care and Retirement Costs

A 1970 reorganization enacted by the Congress converted the Post Office Department, a federal executive department, into the off-budget enterprise now called the United States Postal Service (USPS). 9/ Like most other federal operations, postal employees and the service itself each contribute to the CSR and the federal health-care programs. The Postal Service also contributes additional amounts to the CSR program to cover future retirement cost increases that result from negotiated USPS pay raises. At present, however, the Postal Service incurs no liability for the expense of annual COLAs for postal retirees, or for annuitants' health-insurance costs. These costs are funded through two separate appropriation accounts in the federal budget; this has held down postal operating expenses and postage rates. If the Postal Service were charged for its share of both CSR outlays attributable to COLAs and the federal cost of annuitant health-care coverage, five-year budgetary savings would total $5.0 billion--$2.6 billion for health benefits and $2.4 billion for retirement (see Table

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9. The Postal Reorganization Act of 1970 (P.L. 91-375) was signed into law on August 12, 1970.

VIII-3). These estimates assume that charges to the Postal Service would begin in 1984 and not include cost increases occurring from 1970 through 1983. Postage rates under this proposal could rise by 3 percent over the next five years, resulting in an estimated 1 cent increase for first-class stamps.

TABLE VIII-3. BUDGET SAVINGS FROM STRATEGIES TO REDUCE FEDERAL EMPLOYMENT COSTS (In billions of dollars)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Charge Postal Service for FEHB and CSR						
Budget Authority	0.4	0.5	0.6	0.6	0.6	2.8
Outlays	0.5	0.7	1.0	1.3	1.5	5.0
Expand Contracting Out						
Budget Authority	0.1	0.3	0.6	0.9	1.2	3.0
Outlays	--	0.1	0.2	0.3	0.5	1.1

NOTE: Totals may not add because of rounding.

When the Postal Service was established, it was expected to achieve self-sufficiency. Thus, in theory, it should not be subsidized by federal appropriations. From this perspective, today's postal system essentially benefits specific individuals and organizations who should bear the full costs of mail services. Moreover, subsidized postal operations could give the Postal Service an unfair advantage over private-sector competitors.

Benefits in both areas covered postal workers before the reorganization effected in 1970, and the law makes their maintenance mandatory. The act prohibits the Postal Service from negotiating benefit changes in the federal health-care and retirement programs and assures continued participation on the part of postal employees. Thus, the service and its customers might argue that the assessment of full benefit costs to the Postal

Service (which applies to no other federal agency) would be unfair and would intensify pressure on postage rates. Obviously, the Congress could continue part of the subsidy, as a short-term compromise, through annual appropriations to the Postal Service rather than to the pension and health-care accounts. This would make the subsidy more visible and improve the government's cost accounting.

Expand Contracting Out

In 1981, the federal government spent some $32.5 billion on commercial-type support services such as property maintenance, food preparation, and security. About 40 percent of the services performed for agencies is now "contracted out" to private-sector firms, with the remainder provided "in-house" mainly by federal blue-collar workers.

Primarily because of lower expenses for pay and fringe benefits, private contractors can often provide the government with support services at less cost than in-house federal workers can. Current policy requires agencies to shift services to private firms. But at the same time, it exempts nearly three-fifths of these services from consideration for conversion; most exemptions are in the Defense Department and the Veterans Administration. Current exemptions are justified on grounds that they protect military readiness and the well-being of military veterans.

If exemptions for certain Defense Department and Veterans Administration activities were relaxed and contracting out accelerated, the number of additional jobs shifted to private firms in the long run could reach 185,000. On this basis, annual savings beyond the next five years could eventually total $1.2 billion (current dollars). Short-term budget savings, however, would be small--averaging $0.2 billion per year through 1988. Contracting out takes time to implement; certain transition costs for employee layoffs and other expenses occur in the short term; and cost savings for such items as retirement have deferred effects.

Supporters of expanded contracting out claim that the government ought not engage in commercial activities that the private sector can provide. With regard to current exemptions, they point out that, in the past, federal agencies have sucessfully used contractors to support military and health-care activities in a variety of circumstances, including armed conflict. In response, critics point to the decline in service quality that often accompanies contracting out and to the employment concerns of federal workers threatened by loss of jobs to the private sector. They claim, moreover, that contracting out support services makes the government party to the substandard compensation practices of certain private-sector employers. With regard to current exemptions, skeptics argue that, limited successes notwithstanding, no chances should be taken that would impair the nation's security or with the commitment to care for war veterans.

CONCLUDING COMMENTS

Actions that limit federal civilian pay and retirement costs could achieve significant budgetary savings. In determining which particular approach to pursue, the Congress will want to weigh potential short- and long-term budgetary effects against the government's responsibilities as a model employer and its need to attract and retain a qualified work force.

At present, many observers believe that the government can ill afford adjustments necessary to achieve comparability between federal and private-sector earnings for similar work. For example, achieving comparable pay levels, as measured under current law, could require October 1983 adjustments averaging at least 20 percent. The CBO baseline, in contrast, assumes a 5.5 percent adjustment that reflects anticipated increases in private-sector pay. In either case, more stringent limitations could be enacted. Major budgetary options available to the Congress include a one-year freeze on federal pay adjustments, indexing pay to annual changes in the CPI, and delaying within-grade salary adjustments. Such measures would avoid from $6.3 billion to $16.2 billion in total federal expenditures through 1988.

The Congress could also undertake modifications in federal retirement provisions, either in conjunction with or as substitutes for restraining federal pay increases. While limiting COLAs offers an obvious means of generating immediate budgetary saving, certain other benefit modifications could also reduce expenditures and help align federal costs more closely with private-sector practice. Alternatively, the Congress could change the retirement system altogether by establishing individual retirement accounts for new employees. The latter approach could significantly reduce federal pension costs in the long run but would probably generate little outlay savings in the next five years.

Potential for additional large reductions in federal compensation costs is also available in two other areas. If more support services now performed by federal workers were contracted out to private firms, the government would eventually spend at least $1 billion less for annual compensation costs, although near-term savings would be small. This subject remains controversial, however, primarily as it bears on quality of service and potential effects on federal job security. Eliminating pension and health-care subsidies now enjoyed by the Postal Service could generate immediate savings--beginning at about $0.5 billion in 1984 and accumulating to some $5.0 billion through 1988.

CHAPTER IX. USER FEES AND OTHER GOVERNMENT CHARGES

The federal government currently subsidizes many activities that serve finite, clearly identifiable, and often narrow groups of businesses and individuals. Rather than continue to subsidize these activities, the Congress could shift the costs of such programs and services from the general taxpayer to the specific beneficiaries. Doing so would entail levying either higher or altogether new fees and charges for the subsidized services. Such fees or charges would reduce the budget deficit by offsetting federal expenditures. At the same time, they would promote an economically efficient allocation of national resources.

The range of federally provided special services and programs is wide. It encompasses construction, maintenance, and operation of public infrastructure (highways, inland waterways, ports, and other major capital facilities that make up the physical framework of the nation's economy), as well as development and management of natural resources through such activities as Outer Continental Shelf leasing for offshore oil and gas production and the generation of electrical power. The federal government also undertakes various financial, informational, and support services as well as numerous regulatory oversight activities that range from economic and financial regulation to environmental and safety regulation. All these special activities and programs fall under the nondefense discretionary spending category.

Under current policy, the beneficiaries or users of many of these special services and programs pay fees or other charges that partly cover their federal costs. The federal government will collect about $27 billion in such fees and charges during 1983 and $36 billion in 1988. 1/ These collections will offset gross federal expenditures for various nondefense discretionary programs.

Budgetary treatment of current user fees and charges varies: most are classified either as budget receipts or as offsetting receipts. Budget receipts are collections (based on the government's power to tax) entered

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1. These estimates include only those fees and charges classified as budget receipts or offsetting receipts. An additional $5 billion to $10 billion are classified as offsetting collections and credited directly to appropriation or fund accounts.

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on the revenue side of the budget. Offsetting receipts, coming from business-type or market-oriented transactions between the government and the public, are subtracted from disbursements to calculate total outlays. A large portion of the collections from current user fees or government charges takes the form of offsetting receipts. Some $15.7 billion in fees and charges during 1983 will be offsetting receipts--mostly from Outer Continental Shelf leasing for offshore oil and gas production. These collections will not be reflected in the revenue totals shown in the budget, but they will be deducted from disbursements in order to calculate total outlays--thereby understating gross federal expenditures. Another $11.2 billion in fee collections (mostly from highway and airway users) are classified as budget receipts. These collections are captured in the budget's revenue totals, and similarly, the federal outlays for programs and services financed by these collections are reflected in the budget totals.

BUDGET HISTORY AND PROJECTIONS

The last several years have seen growing recognition that user fees and other charges for government services reduce the federal budget deficit while also promoting efficient investment. Numerous efforts have therefore been made to increase user fees and similar charges, and significant increases in some user fees or charges have been enacted.

Recent History, 1980-1982

Since 1980, the Congress has considered numerous proposals to raise user fees and other charges for government-provided services and programs. President Reagan's first budget submission called for broader application of the user fee principle, including institution of new or increased fees for Coast Guard services, nuclear waste disposal, deep-draft and inland waterway navigation, and aviation. Despite wide discussion of the various proposals, however, no significant Congressional action was taken on user fees before 1982. Collections from user fees and other government charges grew from about $18 billion in 1980 to $20.5 billion in 1982 (see Table IX-1).

The Current Situation

The second session of the 97th Congress did, however, enact several new or significantly increased user fees and government charges. The budget resolution for 1983 called for large revenue increases, a portion of which was to be raised through user fees--specifically, $900 million in 1983,

TABLE IX-1. FEDERAL COLLECTIONS FOR SPECIAL SERVICES AND PROGRAMS, BY CATEGORY (In billions of dollars)

	Actual		Estimated	Baseline Projection				
Category	1980	1982	1983	1984	1985	1986	1987	1988
Public Infrastructure								
Offsetting Receipts	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7
Budget Receipts	8.5	7.1	10.9	14.4	14.9	16.1	16.9	17.5
Subtotal	8.9	7.6	11.4	15.0	15.5	16.7	17.6	18.2
Resource Management								
Offsetting Receipts	8.8	12.5	14.8	14.1	14.9	19.4	17.5	17.4
Budget Receipts	--	--	--	--	--	--	--	--
Subtotal	8.8	12.5	14.8	14.1	14.9	19.4	17.5	17.4
Financial, Informational, and Support Services								
Offsetting Receipts	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.2
Budget Receipts	--	--	--	--	--	--	--	--
Subtotal	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.2
Regulatory Oversight								
Offsetting Receipts	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Budget Receipts	--	0.2	0.3	0.3	0.3	0.1	*	*
Subtotal	0.1	0.3	0.4	0.4	0.4	0.2	0.1	0.1
Total Fee Collections								
Offsetting Receipts	9.5	13.2	15.7	15.1	15.9	20.3	18.5	18.4
Budget Receipts	8.5	7.3	11.2	14.7	15.2	16.2	16.9	17.5
Total	18.0	20.5	26.9	29.8	31.1	36.5	35.4	35.9

* Less than $50 million.

NOTE: These estimates exclude offsetting collections credited directly to appropriation or fund accounts.

$1 billion in 1984, and $1.4 billion in 1985. The resolution also called for increased offsetting receipts from user fees.

After passing the budget resolution for 1983, the Congress proceeded to enact aviation user fees (under the Tax Equity and Fiscal Responsibility Act of 1982) that increased revenue collections by an estimated $786 million in 1983, $966 million in 1984, and $1.07 billion in 1985--somewhat below the targets set in the budget resolution. (The revenue effects of TEFRA are examined in Chapter X.) Most of this increase reflected a reimposition of taxes that had expired or been reduced in 1981. Thus, enactment of these aviation user fees partly reflected a continuation of past policies.

The 97th Congress, near the close of the second session, also enacted a substantial increase in highway user taxes under the Highway Revenue Act of 1982. The first such rise since the tax was instituted in 1956, this increase raised the highway fuel tax from 4 cents per gallon to 9 cents per gallon, while simultaneously adjusting other highway use taxes. Similarly, several other proposals for new or increased user fees and government charges were enacted, including increased fees for irrigation water provided by the Bureau of Reclamation and new fees for nuclear waste disposal. Collections from user fees and charges for special services and programs will therefore increase in 1983, totaling about $26.9 billion.

Baseline Projections, 1984-1988

Under current policy, collections from user fees and government charges are projected to total $29.8 billion in 1984, climbing to $35.9 billion by 1988. These levels reflect substantial increases in collections from user fees and other government charges over pre-1983 levels. Most of the projected rise stems from the recently increased highway user fees. Collections from highway users will total about $11.7 billion in 1984--an increase of $3.1 billion, or 36 percent, over the 1983 level--and will continue to increase to $13.4 billion by 1988. Highway user tax receipts alone account for some $1.7 billion of the $6.1 billion increase projected between 1984 and 1988. An additional $1.4 billion of this increase is projected to come from aviation user fees. Most of the remaining increase (about $2.4 billion) results from increased receipts from rents and royalties on the Outer Continental Shelf.

DEFICIT REDUCTION STRATEGIES

Though user fees and other government charges for special services and programs reduce the budget deficit by offsetting federal expenditures, the rationale for user fees and charges extends beyond this goal to considerations of economic efficiency and equity. The federal government provides many facilities and services to individuals and businesses at prices below market rates and often below the government's costs as well. Such subsidies may be appropriate if the overall public benefits of a particular activity are greater than the private benefits. But the public benefits at times may not justify the level of federal subsidy. In such instances, subsidies can result in overuse and inefficient allocation of resources.

The inland waterway transport system, which currently receives large federal subsidies, serves as an example. The costs incurred, or perceived, by inland waterway users are much lower than the real economic cost of that transport mode: users are aware only of the lower, federally subsidized cost. Users respond to this low, subsidized cost by demanding or using more inland waterway transport than they would if the full economic cost of inland waterway transport were charged. (This induced demand, in turn, exerts upward pressure on federal expenditures, as the federal government works to keep pace with the demand for waterway transport facilities.) Moreover, to the extent that federal subsidies reduce the cost of inland waterway transport relative to the costs of other freight transport modes, shippers may be induced to choose waterway transport over other freight transport modes, even though, without federal subsidies, an alternate mode may be the lower-cost one for a particular shipment. Federal subsidies can thereby result in overuse and misallocation of scarce resources.

User fees or charges for special government services reduce federal subsidies and promote efficient government investments by shifting the cost of a given service or program to the users or beneficiaries of that activity. Fees and charges establish an incentive to use the most economic level of government service. Users and other beneficiaries become cognizant of the full economic cost of a given activity and adjust demand accordingly. To the extent that beneficiaries reimburse the government for expenditures made in their behalf, they have an incentive to work with the government to ensure that only cost-effective investments are made. Moreover, user fees and charges lift the financial burden for special services and programs from the general taxpayer and allocate financial responsibility in a more equitable manner--to specific classes of identifiable beneficiaries who have the ability to pay for these services and may not need or warrant federal subsidies.

User fees and other government charges could be increased in order to reduce the federal budget deficit, while simultaneously enhancing economic efficiency and equity through two overall strategies:

- **Set fees and charges to obtain the market value for federal services.** In cases where federal services have counterparts in the private marketplace, market prices could serve as a guide for setting levels of federal fees and charges.

- **Set fees and charges for services to recover the full costs to the government.** In instances in which the private market offers no prototype to look to for price levels--or when the federal government is the uniquely appropriate provider of services--user charges could be set at levels that recover the government's costs.

These two strategies for reducing the federal budget deficit can be applied to a variety of special services and programs. Any attempt to recover either the market value or the federal costs of government programs must, however, balance budgetary and economic efficiency goals against administrative and equity concerns.

Ideally, from the standpoint of economic efficiency, the users or beneficiaries of government services and programs should be charged variable fees (as opposed to uniform fees) that reflect the costs imposed, or value derived, by each individual user or class of users. By limiting the number of situations in which certain users subsidize others (by so-called "cross-subsidies"), such variable fees promote both economic efficiency and equity. For example, the costs to build, operate, and maintain the nation's ports vary widely from one port to another. If uniform user fees were imposed on all port users, then users of heavily used, low-cost ports would cross-subsidize the users of other, higher-cost ports. On the other hand, if fees were designed so that collections at each port paid all the costs of that particular port, each facility would pay its own way and cross-subsidies among ports would be eliminated. Such a system would likely result in very high fees at low-volume, high-cost ports and could possibly force some of these ports to close. The net effect, however, would be to route traffic through the more efficient ports where unit costs are lower. Thus, variable fees could encourage the development of a more efficiently-configured port system.

Such improved efficiency comes at some cost, however--specifically, increased administrative costs. In general, variable fees are more cumbersome to administer than uniform, program-wide fees. A uniform fee avoids the complexity of distinguishing between and accounting for the costs and benefits incurred by different individuals or groups of users. Moreover, a uniform fee that spreads the costs over a broad base may reduce incentives to evade the fee, thereby simplifying enforcement.

Another issue in applying the user fee principle to special services and programs centers on the timing of collections vis-a-vis expenditures. Much of the federal spending for special services and programs takes the form of investment in capital facilities. The extended economic life of these facilities raises a question: When should their capital costs be recovered? One option is to recover the costs of these capital investments on a cash basis--that is, set user fees at a level sufficient to offset outlays at the time of expenditure. This may be desirable if many capital projects are under construction over a period of years, as is the case with the highway program. In such instances, users of one project pay for the construction of another project and it is assumed that the cross-subsidies offset each other in the long run. On the other hand, if government expenditures are recovered on a project-specific basis, there are few practical ways to recoup them on a cash basis. Instead, the federal government's investment must be recovered from user fees exacted over the life of the project. The amount of the user fees required will depend on the number of years over which the initial costs are amortized, as well as on the interest rate applied. Full-cost recovery requires that realistic interest rates be applied--otherwise, the user fees may mask substantial subsidies.

A third issue centers on the dislocations and inequities that can accompany increased user fees and government charges. Federal spending for many programs and services began before user fees for these investments were considered. Economic and equity considerations may constrain efforts to recoup these costs by raising existing fees or instituting new ones. For example, if businesses have made investment decisions on the basis of past government subsidies, the sudden enactment of user fees to negate these subsidies could create substantial economic hardships. Though the government has no legal obligation to ensure citizens against changes in its policies, such situations may be unfair and could place a hardship on certain users. As a practical matter, however, dislocational hardships could be greatly alleviated through several alternatives. One option would be to phase in any new or increased user fees. This was done when user fees for the inland waterways were instituted in 1978. Such a phase-in would give users time to adjust to the higher costs and could minimize the dislocational hardships associated with such fees.

The following sections examine the potential for extending the user fee principle in each of the four categories of federal services and programs outlined at the beginning of this chapter. Most of these options have been considered (and many rejected) by the Congress in past sessions.

INFRASTRUCTURE DEVELOPMENT AND MAINTENANCE

A primary example of a federal service investment that is not amenable to market-based prices is public infrastructure facilities--the roads, waterways, and other facilities that make up the U.S. economy's physical framework. These infrastructure investments cannot be provided efficiently by the private market. They do, however, yield important benefits to specific classes of users who can be identified and charged for the services. Federal intervention is necessary simply to coordinate, rather than subsidize, these infrastructure investments. Since the private market offers no equivalent for these services, however, an appropriate benchmark for user fees in this area would be the government's cost. Fees that recover the government's costs would help to shift the patterns of investment toward a more efficient and economic infrastructure and would reduce the federal budget deficit.

A large portion of federal expenditures for infrastructure development, operation, and maintenance is currently funded through user fees, primarily in the areas of highways and airways. The current user fees do not recover the full government costs, however, and in some programs no user fees at all are now in place. Several program areas where user fees could be increased or applied are examined below.

Highways. The primary infrastructure user charges now in place are those that finance the highway program. Highway user charges comprise a series of excise taxes on gasoline, diesel fuel, tires, trucks, and truck parts. Revenues from these use taxes are, for the most part, earmarked and set aside in the Highway Trust Fund for use only in highway programs. (The major exception is that, starting in 1983, the revenues from 1 cent of the 5-cents-per-gallon tax increase on motor fuel--or about $1.1 billion annually--will be used for public transit capital grants.) The trust fund mechanism is intended to make the federal highway program self-supporting: the highway program is financed by highway users.

Although user charges contribute significantly to the federal effort in highways, not all highway users pay these fees; some users are exempt. Thus, although current highway user fees (including the recent increase in highway user taxes enacted in December 1982) will generate an estimated $11.7 billion for highways in 1984, an additional $680 million will be lost through various highway tax exemptions.

Three major groups of beneficiaries are exempt from part or all of the 9-cents-per-gallon tax on motor fuel: state and local governments; bus operators, including transit bus operators, school bus operators, intercity and other private bus operators; and producers of gasohol. Few economic reasons justify continuing these exemptions, which, in fact, are subsidies. Buses and state and local vehicles cause wear and tear on the nation's roads just as other vehicles do. The subsidy to gasohol producers, justified as contributing to the nation's energy independence, is large--equivalent to 50 cents per gallon of ethanol--and appears excessive given gasohol's modest contribution to the nation's energy self-sufficiency. Eliminating these tax exemptions would promote more efficient allocation of resources while increasing annual receipts to the government by about $680 million.

Furthermore, not all highway programs are currently financed from user fees. Some highway expenditures, many of which are outside the transportation function of the budget (such as funds allocated to the Forest Service, National Park Service, Appalachian Development Commission, Department of Defense, and Bureau of Land Management) are financed from general funds. Though the recent highway tax legislation shifted some of these expenditures to the Highway Trust Fund, some 3 percent (or about

$400 million) of all federal spending for highways in 1984 will be financed from general funds. The user fee principle could be extended by financing all highway expenditures from the Highway Trust Fund. This would reduce general fund expenditures by about $2.0 billion over the next five years, but the reduction would be offset by increased spending from the trust fund. Thus, unless highway taxes were increased to cover the costs now paid from general funds, there would be no reduction in the federal budget deficit.

The federal budget deficit could therefore be reduced by as much as $680 million in 1984 through the elimination of all exemptions from highway use taxes. If user fees were increased to fund (on a cash basis) all highway programs, additional savings could total $400 million. Savings from these two options would total $5.4 billion over the 1984-1988 period (see Table IX-2).

Airports and Airways. The other major infrastructure user charges already in effect are those that finance airports and airways. The Airport and Airways Revenue Act of 1970 established a trust fund to finance federal expenditures for airports and airways. The trust fund is financed by taxes on passenger tickets and by certain other taxes paid by airport and airway users. The authorization for these aviation user taxes expired in 1980, but they were renewed last year (at somewhat higher levels than in the past) under TEFRA.

The use of the Airport and Airways Trust Fund has traditionally been restricted to airport capital improvements and a portion of the airway system's operating costs. Trust fund revenues financed only about 38 percent of the system's operating costs in 1982. Thus, user fees funded only about 41 percent (or $1.2 billion) of all federal expenditures for airway capital and operating costs (which totaled $2.9 billion), despite an uncommitted surplus of about $2.2 billion in the trust fund.

The user fee principle could be extended by financing all airway system operating costs from the trust fund. This would curb the drain on general revenues by about $6.9 billion over the next five years, but the reduction would be offset by increased spending from the trust fund. Thus, there would be no effect on the federal deficit unless aviation user fees were increased to cover the operating costs now paid from general funds.

One option for increasing aviation user fee receipts would be to increase the user fees levied on general aviation--that is, aircraft owned and operated by firms and individuals for their own use. At present, general aviation pays only a small portion--less than one-fifth--of its share of federal aviation expenditures. Commercial air carriers, in contrast, currently pay (through the 8 percent ticket tax and other fees financed by

TABLE IX-2. BUDGET SAVINGS FROM INFRASTRUCTURE USER FEES SET TO RECOVER FULL FEDERAL COSTS (In billions of dollars)

Services	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Highways	1.08	1.08	1.08	1.08	1.08	5.40
Airways	1.07	1.10	1.13	1.07	1.07	5.44
Inland Waterways	.70	.70	.75	.75	.80	3.70
Deep-Draft Navigation	.50	.50	.50	.50	.55	2.55
Coast Guard Services	1.09	1.12	1.15	1.19	1.22	5.77
Total	4.44	4.50	4.61	4.59	4.72	22.86

travelers) more than their attributable costs. General aviation accounted for an estimated $780 million in system costs during 1982 but paid only about $14 million in user charges.

Throughout the 1970s, general aviation users paid a tax of 7 cents per gallon on gasoline and jet fuel. With the 1980 expiration of aviation user fees, this tax temporarily reverted to 4 cents per gallon on gasoline only. General aviation user taxes were subsequently increased under TEFRA to 12 cents per gallon of gasoline and 14 cents per gallon of jet fuel. Nevertheless, general aviation users still pay only a small portion of their costs. Only if these taxes were increased to about $1.20 per gallon of fuel would general aviation users pay their full costs. Such a fuel tax increase would be neither an efficient nor an equitable means of recovering general aviation costs, however. Fuel consumption does not necessarily reflect the benefits received or costs imposed by individual general aviation users at different airports. Landing fees or congestion tolls would thus be a more efficient and equitable means of generating the same revenues. In either case, full recovery of general aviation costs would raise an additional $5.4 billion in budget receipts over the 1984-1988 period (see Table IX-2).

Inland Waterways. The user financing mechanism was only recently extended to inland waterways. Inland waterway user charges, in the form of a fuel tax, were established under the Inland Waterways Revenue Act of 1978. These charges took effect in 1981 and will be phased in over the next several years, rising from 4 cents per gallon at the outset to 10 cents per gallon in 1986 and thereafter.

Current inland waterway user fees fall far short of financing federal expenditures for inland waterways, however. The U.S. Army Corps of Engineers will spend an estimated $4.0 billion to build, operate, and maintain inland waterway facilities during the 1984-1988 period. By comparison, the current fuel tax will generate only about $280 million in budget receipts over the same period--about 7 percent of the projected federal outlays. And even in light of the planned increase in the waterway fuel tax, offsetting receipts are projected to fund only about 8 percent of federal inland waterway expenditures in 1988. Thus, significant savings could be realized through increased fees on inland waterway users. Such fees might not necessarily take the form of a fuel tax but instead could take the form of direct locking fees or segment tolls that reflect the actual costs of building, maintaining, or operating a particular waterway facility or segment. Full recovery of total federal expenditures for inland waterways would reduce the federal budget deficit by approximately $3.7 billion over the 1984-1988 period (see Table IX-2). Alternatively, setting fees to recover only half of federal expenditures would result in cumulative savings of $1.7 billion during 1984-1988.

Deep-Draft Navigation. The Corps of Engineers spends about $500 million a year to maintain and improve ports and channels that accommodate oceangoing vessels and Great Lakes shipping. The largest share of the corps' resources is devoted to maintenance dredging. Other corps' activities include construction and maintenance of jetties and breakwaters, channel widening, and anchorage construction.

Although user fees are not now collected to offset expenditures for the corps' activities, a strong case can be made for instituting them. Commercial shippers are readily identifiable users who benefit directly from the corps' programs. User fees would promote economic efficiency as well as equity, because users would pay the cost of the corps' services. Moreover, inasmuch as the Congress has broadly applied the user charge principle to other modes of transport, there is no economic (or technological) reason why this same rationale should not be applied to deep-draft ports and channels.

Assuming a constant real program level between 1983 and 1988, the corps will spend about $2.6 billion for deep-draft navigation during the 1984-1988 period--$1.9 billion for operation and maintenance and $0.7 billion for construction. Thus, a full-cost recovery fee would recoup $2.6 billion from 1984-1988 and would increase the average cost of all commodities using deep-draft facilities by about 22 cents per ton (see Table IX-2). If, however, fees were set to recoup only the cost of operation and maintenance, the federal deficit would be reduced by about $350 million in 1984 (at an average cost increase of 16 cents per ton of commodity carried) and $1.9 billion over the 1984-1988 period.

U.S. Coast Guard Services. The U.S. Coast Guard spends more than $1.1 billion a year on search-and-rescue activities, aids to navigation, marine safety, and environmental protection. Of this sum, more than 80 percent provides federal services or facilities to identifiable groups of civilian maritime users.

Coast Guard services provide substantial, and uncompensated, benefits to the commercial shipping industry. For example, without navigational aids--such as buoys and other channel markings--commercial shipping in U.S. inland and coastal waters would be substantially more hazardous, difficult, and costly than it is now. The capital and operating costs of these aids could thus be recovered from the shipping industry, just as highway users pay for the costs of roads.

The Coast Guard also engages in search-and-rescue operations for private mariners who are lost or otherwise in trouble; about 72 percent of the Coast Guard's search-and-rescue activities assist recreational boaters. These search-and-rescue costs could be recovered through registration fees on recreational boats that use coastal and inland waterways. Other fees could be assessed on commercial and fishing vessels.

Full recovery of the allocable federal costs for these navigation and recreational boating activities would reduce net federal expenditures by about $1.1 billion in 1984 and $5.8 billion in the 1984-1988 period (see Table IX-2).

RESOURCE MANAGEMENT

The federal government undertakes a variety of activities to develop and manage the nation's natural resources. Such activities include land conservation and forestry programs (Department of Agriculture); programs for management of national parks, wilderness areas, federal rangeland, and the Outer Continental Shelf (Department of the Interior); and production of electrical power and management of the Strategic Petroleum Reserve (Department of Energy). Some of these programs and activities are currently subject to user fees and other government charges; others are not. The existing user fees and charges together will bring in about $14.8 billion in 1983.

Current user fees and other government charges for resource management activities could be increased or new fees instituted to reduce net federal expenditures. One strategy would be to set prices for federal resources that have comparable private markets. This would result in efficient use of government resources and increases in government revenues. Several activities for which market prices could be charged are examined below.

Federal Irrigation Programs. Under the auspices of the Bureau of Reclamation, the federal government provides irrigation water for agriculture in the West. The bureau was established in 1902 to administer development of arid and semiarid lands in 17 western states; thus, to encourage development of the West, the bureau provided subsidized water. Irrigation water provided by bureau water projects was not sold at market rates nor even at cost. The federal government continues to subsidize water for western agriculture, even though the original purpose of the subsidy--settlement of western land--has long been fulfilled.

The government currently charges user fees that are below market rates for irrigation water delivered in the West. These low rates encourage wasteful use of water in regions with scarce natural water resources. For example, California farmers receiving federally subsidized water grow low-value crops such as cotton and rice (the latter is a particularly water-intensive crop), which can better be grown elsewhere. Moreover, these crops are subject to federal price supports, because excess supplies drive down prices. In this case, low prices for one government service (irrigation water) result in higher federal spending for another government program (agricultural price supports, examined in Chapter VI).

Raising fees for Bureau of Reclamation water could increase receipts to the federal government. Any such increase would be limited, however, by existing contracts that constrain future price increases for current water deliveries. Increased receipts would therefore depend, at least in the near term, on levels (and prices) of new water deliveries. Raising fees on all new contracts could, however, save roughly $12 million over the five-year period 1984-1988 (see Table IX-3).

Grazing Rights on Federal Lands. Several federal entities allow livestock grazing on land under their jurisdictions. The pricing policy for these grazing rights varies from office to office, however. Two entities, the Defense Department and the Bureau of Indian Affairs, receive market values for their grazing rights by auctioning them. The offices with the largest land holdings, however--the Forest Service and the Bureau of Land Management--allocate grazing rights by permit and collect fees based on the lessees' ability to pay. These are set according to beef cattle prices, forage values, and other costs associated with raising herds. In many cases, however, possession of a grazing permit, which is obtained by federal administrative process, is of substantial economic value to the holder. Competing ranchers, not so favored, must pay market rates and are at a comparative disadvantage. If federal grazing permits were auctioned, with the required minimum bid set equal to the current formula fee, the government could collect the difference between market rates and the current below-market grazing fees. Such a policy could raise as much as $3 million in additional receipts in 1984 and $53 million over the next five years (see Table IX-3). Alternatively, rather than auctioning grazing permits, the government might ensure higher collections by changing the formula used to calculate fee levels.

Power Marketing. The federal government, under the auspices of five power administrations, sells electrical power generated at dams built and operated by the Bureau of Reclamation and the Army Corps of Engineers. The five power marketing administrations are the Bonneville Power Administration, the Western Area Power Administration, the Southwestern Power Administration, the Southeastern Power Administration, and the Alaska Power Administration.

Existing laws require these agencies to cover costs and repay all federal investment through rates to electricity consumers. In recent years, however, revenues to the Bonneville Power Administration (the largest of the government's power marketing administrations) have not been sufficient to cover its costs, making it necessary for Bonneville to defer repayment of its federal investment. Between 1977 and 1981, Bonneville postponed about $500 million of its planned repayment and deferred over $200 million in interest payments. In recent years, Bonneville has increased its rates substantially, but revenues have continued to fall short of its obligations. Several reforms of its rate-setting standards could improve Bonneville's ability to meet these expenses. Such reforms could involve requiring rate tests (comparable to those used by the Tennessee Valley Authority); changing the method of estimating the cost of service; reevaluating repayment obligations; and allowing the enterprise to issue short-term debt (subject to appropriate standards and oversight) to cover operating needs. The impact of such changes cannot be estimated precisely because of the diverse variables and uncertainties. But if Bonneville had achieved the Tennessee Valley Authority's target ratio of income to interest costs during the 1977-1981 period, it would not have needed to postpone principal or interest payments. If Bonneville's rate structure were reformed so that its projected revenues covered its obligations, the additional revenues collected by Bonneville would reduce outlays by about $41 million in 1984 and $61 million in 1988 (see Table IX-3).

Federal Recreational Areas. Under the authority of the Department of the Interior, the federal government operates a broad assortment of

TABLE IX-3. BUDGET SAVINGS FROM RESOURCE MANAGEMENT USER FEES SET AT MARKET PRICES OR FULL COST RECOVERY (In millions of dollars)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
			Market Price Charges			
Irrigation Water	--	3	3	3	3	12
Grazing Rights	3	6	9	15	20	53
Subtotal	3	9	12	18	23	65
			Full Cost Recovery Charges			
Outdoor Recreation Areas	30	60	94	97	100	381
Strategic Petroleum Reserve	300	300	300	300	300	1,500
Power Marketing	41	43	53	59	61	257
Subtotal	371	403	447	456	461	2,138
Total	374	412	459	474	484	2,203

recreational areas--parks, beaches, historic monuments, and the like--that attract approximately 800 million visitors each year. The government spends some $350 million a year to maintain these areas. Entrance fees, in varying amounts, are charged at only a small fraction of these federal facilities. In 1980, fewer than 5 percent of all visitors were charged entrance fees, producing federal revenues of only $5 million. Visitors who paid at all to enter these facilities paid an average of less than 20 cents per person. Because only certain areas charge fees, however, all visitors to all federal recreational areas pay about 1 cent per visit when receipts are averaged over all sites and visits.

Though charging fees is impractical in some instances (either because the recreational areas are too remote, or because access to them cannot be controlled), fees are already collected in many areas and could easily be raised to an average of 60 cents a visitor above the cost of collection. If this were done, federal receipts would rise by $30 million in 1984 and by

$381 million over the 1984-1988 period (see Table IX-3), bringing the nation's recreational areas closer to being self-sustaining.

Strategic Petroleum Reserve. The Strategic Petroleum Reserve (SPR), administered by the Department of Energy, is another instance of the government's providing a service--in this case, insurance against another oil import curtailment--without recovering the full costs of the service. The Congress has placed much of this program, which costs $2 billion to $4 billion annually, off budget, but the effect on federal financing needs remains the same as if it were on budget.

The cost of the SPR is made up of two parts: the cost of the oil itself (estimated at $2 billion to $4 billion a year) which is off budget, and the cost of constructing storage facilities for the oil (estimated at $240 million to $300 million a year) which remains on budget. Under current policy, the purchase cost of the oil would presumably be recovered were SPR stocks to be used; the oil could be sold to consumers at a price sufficient to recoup the government's full purchase cost, including interest. These sales would not recover storage construction costs, however.

The federal government could also recover the cost of SPR storage construction by imposing a tax, or fee, on current users of oil. Such a fee could take three forms: an import duty on crude oil and refined products; a tax on gasoline; or a fee on crude oil used by U.S. refiners, with an equivalent tax on imported refined products. Since the charge needed to pay the storage costs of SPR would be less than 6 cents per barrel, or 0.3 cents per gallon of gasoline, the impact on consumer prices would be nominal. Similarly, the effects on the automobile industry should not be significant. A tax of 6 cents per barrel on domestic and imported refined products would raise federal revenues by $0.3 billion in 1984 and $1.5 billion during the 1984-1988 period--about the cost of the SPR storage facilities during this period (see Table IX-3).

FINANCIAL, INFORMATIONAL, AND SUPPORT SERVICES

The federal government provides a wide range of financial, informational, and support services that benefit limited groups of users. These include such diverse activities as subsidized postal service; collection, processing, and distribution of economic data; processing and registration of patents and trademarks; preparation and distribution of aeronautical and nautical charts and maps; and grievance arbitration. Many of these services are provided most efficiently by the federal government; others--such as patent and trademark licensure--can only be provided under federal authority. Nevertheless, these services provide direct benefits to users who could